## REMARKS

The above amendment and these remarks are responsive to the communication from Examiner Dustin Nguyen dated 3/9/2005.

Claims 1-27 are in the case, none as yet allowed.

## 35 U.S.C. 112

Claims 1-12, 14, 15, 18-22, 24-27 have been rejected under 35 U.S.C. 112, second paragraph, as indefinite, with several terms lacking antecedent basis.

Applicants have amended the claims to correct the indefiniteness situations enumerated by the Examiner at page 2 of the Office Action.

Applicants note that claim 27 depends from claim 4, and that claim 4 does provide antecedent basis for the recitation of "said server application" in claim 27.

## 35 U.S.C. 103

Claims 1-7, 9-27 have been rejected under 35 U.S.C. 103(a) over Beardsley et al. [U.S. 5,361,344, hereinafter

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Beardsley] in view of Angeleo et al. [U.S. 5,748,888, hereinafter Angelo].

In Applicants' invention, a method is described of sending each keystrike individually (that is, full duplex character interactive mode) to the server as they occur, even though the end client is forced to communicate in 1/2 duplex block mode by the (2370 or 5250) mode enforced by the initial server.

With respect to claims 1-7 and 9-27, Beardsley's patent describes an SNA terminal emulator which receives from a UNIX program an output sequence of characters, produces an emulated display, and protects the emulated display from operator alteration except for certain fields.

Everything Beardsley describes is for the purpose of formatting a UNIX program output on a block mode display. All of this display formatting is prior art in the TCP/IP Telnet client/server environment described by applicants' in their disclosure. Applicants did not invent, and do not claim formatting a block mode display. Applicants' disclosure does teach methods to make a half duplex block mode terminal emulator "keyboard" behave as if it were a full duplex character interactive I/O terminal emulator keyboard without the requirement of changing either the client, the server, or the business logic of the application program.

Beardsley teaches:

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"Thereafter, the block mode terminal transmits a response character sequence which includes data characters written by an operator into the unprotected fields and no characters from the protected portions of the display." [Abstract]

But full duplex character interactive I/O terminal emulators do not transmit character sequences. Rather, they transmit a single character at a time as they are typed at the keyboard so that each character can be individually inspected by the receiving side as it is typed. In fact, an implementation based on Beardsley would suffer from the exact same shortcomings as applicants' invention attempts to address.

Angelo teaches adding an additional security box with a private bus to the keyboard to a Pentium or 486x processor for the purpose of preventing malicious programs from snooping keystrokes during the period of time sensitive information is being typed, passwords, for example. Angelo describes existing art like keyboard buffers and character interactive I/O keyboards which is what he is describing in Col. 8. Nowhere does Angelo teach a method for making a half duplex block mode terminal emulator "keyboard" behave as if it were a full duplex character interactive I/O terminal emulator keyboard without the requirement of changing either the client, the server, or the business logic of the application program.

Applicants have amended all independent claims to

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clarify that <u>single characters</u> are transferred as they are entered at character entry devices even though operating in a half duplex block mode environment in which character sequences are normally transferred.

Further with respect to claims 3 and 4, Angelo at Col. 9, lines 41-47 is describing inner workings of a keyboard controller and its attached keyboard. Nothing here is relevant to TCP/IP block mode terminal emulators operating in character interactive I/O mode.

Further with respect to claim 6, applicants traverse the characterization of Beardsley. In order to describe a cascaded environment it is required, at a minimum, that a third processing system be included. Beardsley makes no mention of a third system, nor is one depicted in the drawings. At no point does Beardsley describe enclosing the client and server together to form a client connected to a third system, as the claim requires.

Further with respect to claim 7, Angelo is describing typical interactive I/O, but not the half duplex block mode environment of applicant's claim.

Further with respect to claim 26, Beardsley is actually describing transferring a sequence of keystrokes, which is how half duplex block mode clients operate. On the other hand, applicant's invention relates to methods for transferring single keystrokes as they are entered, even though operating in a half duplex block mode environment.

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Claim 8 has been rejected under 35 U.S.C. 103(a) over Beardsley, in view of Angelo, and further in view of Shoquist et al. [U.S. Patent 5,361,199, hereinafter Shoquist].

Claim 8 depends from claim 4, and is distinguished from Beardsley and Angelo as previously described.

Applicants did not invent converting a character from ASCII to EBCDIC, but it is an important step in the multistep process which is the subject of claim 8. Further, Shoquist does not run in either 1/2 duplex block mode or full duplex character interactive I/O mode. In fact, Shoquist does not use Telnet at all for communicating to the mainframe. As such, Shoquist, in combination with Beardsley and Angelo, does not teach Applicants' invention as set forth in claims 4 and 8.

## SUMMARY AND CONCLUSION

Applicants urge that rejection of claims 1-27 be reconsidered and withdrawn, and that the case be passed to issue with claims 1-27.

The Application is believed to be in condition for allowance and such action by the Examiner is urged. Should differences remain, however, which do not place one/more of the remaining claims in condition for allowance, the

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Examiner is requested to phone the undersigned at the number provided below for the purpose of providing constructive assistance and suggestions in accordance with M.P.E.P. Sections 707.02(j) and 707.03 in order that allowable claims can be presented, thereby placing the Application in condition for allowance without further proceedings being necessary.

Sincerely,

Richard G. Hartmann, et al.

Ву

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